



THE CORPS' VEGETATION REMOVAL POLICY: IMPLEMENTATION PROBLEMS

The California Department of Water Resources (DWR) values the Corps as a key partner in meeting the shared objective of reducing flood risk. DWR also recognizes the difficulties inherent in implementing a national vegetation policy and variance process for legacy levee systems. Implementation problems caused by Corps vegetation policy extend well beyond the loss of Public Law 84-99 eligibility, and pose grave long-term consequences. Following are some examples of how Corps vegetation management policies adversely impact important flood risk reduction efforts in California.

Critical Levee Repairs

Since 2006, DWR has collaborated with the Corps in repairing 117 critically damaged levee sites throughout the Central Valley, at a cost of approximately \$350 million. These sites were designed and constructed through a close collaboration of the Corps, State and federal regulatory agencies, DWR, and local maintaining agencies to incorporate vegetation into levee repairs to satisfy State and federal environmental acts (i.e., California Endangered Species Act, federal Endangered Species Act and Clean Water Act). Currently, the Corps Sacramento District (District) is assessing the vegetation compliance on these sites. Preliminary results from the assessment indicate that these vegetation features (onsite mitigation) are now noncompliant with Corps vegetation policy, and therefore require new consultations, retroactive construction, and mitigation. DWR believes that these sites are in compliance with the Central Valley Flood System Improvement Framework (Framework), which has precedence over Corps vegetation policy. In order to comply with the Corps' vegetation policy, much of the onsite mitigation vegetation would need to be removed, obligating the District to re-consult under Section 7 of ESA with the National Marine Fisheries Service and the United States Fish and Wildlife Service. DWR estimates the construction and mitigation costs to comply with Corps vegetation policy for 117 sites to be well over \$200 million. It would be fiscally and environmentally irresponsible to expend such an enormous amount of public funds to remove these safe, carefully designed vegetation features without a commensurate, demonstrable increase in public safety.

Natomas Levee Improvement Program

In 2010, the Sacramento Area Flood Control Agency presented supporting data in the format of the Corps' draft Policy Guidance Letter for Requesting a Variance From Vegetation Standards for Levees and Floodwalls (PGL) to allow 23 trees to remain on the lower 1/3 waterside levee slope of the west levee of the Natomas East Main Drainage Canal between levee miles 0.3 and 1.1, with the understanding that the Corps' review and approval process would be conducted in accordance with the Framework. DWR reviewed SAFCA's analysis and found it to be comprehensive and conservative and in accord with the Framework. However, the Corps denied the variance, as stated in their June 16, 2010 letter, for reasons that appear to be based on policy interpretation or subjective judgment rather than engineering analyses. Without a repeatable, consistent variance process founded on sound engineering, science and objective technical analysis, it is not possible for either non-federal agencies, or for the Corps itself, to plan and finance individual or system-wide projects. Even in the short-term of the Framework, the lack of a consistent variance process carries huge impacts for many flood risk reduction projects and programs currently underway in California's Central Valley.

West Sacramento Environmental Impact Report/Draft Environmental Impact Statement

The recent issuance of the West Sacramento Levee Improvement Project Draft EIR/DEIS highlights problems with implementation of the Corps vegetation policy that are typical of similar situations throughout the Central Valley. The West Sacramento document addressed environmental impacts of two pending discrete projects, the West Sacramento CHP Academy and The Rivers projects, as well as programmatic impacts of the longer term

plan to invest \$450 million to correct deficiencies in other portions of levees protecting West Sacramento. The planned programmatic activities involved large areas with substantial numbers of mature trees on levees; the potential impacts from complying with the new vegetation policy in these areas would be major. The Corps-led DEIR/DEIS was initially written from the perspective that compliance with new Corps' vegetation policy is unavoidable, so long-term impacts from the planned programmatic levee improvements would be significant. DWR and DFG objected to this approach as unreasonable. Accordingly, the final EIR/EIS was re-written to focus primarily on the two immediate projects, and to propose ways to meet the Corps' vegetation policy without the major environmental effects of large-scale removal of trees from levees for the longer-term levee repair program. This was proposed to be achieved by (1) following the vegetation retention criteria spelled out in the Framework; (2) complying with a new policy that will replace the Framework when it expires but has similar provisions allowing vegetation to remain on levees where public safety is not endangered by the presence of trees; or (3) obtaining a variance to the Corps' vegetation policy that would allow the trees to remain. All three approaches require substantially more flexibility than existing and proposed Corps vegetation policy. Exactly how future West Sacramento Project levees will be improved without the anticipated severe environmental and financial impacts of woody vegetation removal is not resolved, but merely deferred. The Corps' current vegetation policy and associated variance procedures have never been analyzed in an EIS, nor addressed in any biological opinions, so it is unknown what environmental protections and mitigation will be required when they have been applied and evaluated for their environmental impacts.

Mid-Valley Area Levee Reconstruction Project

This project includes levee reconstruction on the Knights Landing Ridge Cut and the Sacramento River to remediate stability and seepage issues. Sites along the Sacramento River are considered "legacy levees" which, according to the Framework, are eligible for regional variances or engineered alternatives. Levees along the Ridge Cut have relatively little vegetation, while the levees along the Sacramento River have considerable vegetation. Without analyzing the history of the levee, its vegetation, the existing variance, and maintenance practices, the Corps now considers the vegetation to be deferred maintenance, and the costs associated with removal and mitigation are deemed to be ineligible for federal cost-sharing. It is likely that the project will be halted, as the nonfederal sponsors will be unable to certify financial capability. Many levee reconstruction projects planned for other areas in the Central Valley will likely encounter the same fate.

Central Valley Flood Protection Plan

A system-wide approach is needed for the Central Valley Flood Protection System in order to optimize flood risk reduction and environmental enhancement objectives. Such a system-wide approach will likely include levee structural and maintenance standards tied to risk of damage to life and property, life cycle management of existing levee vegetation, research, and adaptive management. Performance standards and criteria for levees will necessarily vary depending on these many factors, thus the CVFPP cannot be implemented within the rigorous constraints of Corps vegetation management policy as currently written.

Wildcat and San Pablo Creeks (San Francisco Bay Area)

The Corps planned, designed, and constructed the Wildcat and San Pablo Creeks project levees to include vegetation for mitigation, habitat, and community benefits. In addition, the Corps Operations and Maintenance manual requires the Contra Costa Flood Control District to maintain the vegetation such that these benefits are sustained. The environmental regulatory agencies have stated in a letter they will not grant permits to remove the trees in the creeks. The local community does not support removal of the trees, and their limited revenue stream only provides for basic maintenance. The Contra Costa Flood Control District estimates a cost of \$300,000 per levee mile to perform the extensive analyses necessary to apply for a variance and \$1 million per levee mile to remove the vegetation and mitigate; this cost is well beyond the limited resources of the District.